LABOR CABINET

Department of Workplace Standards Division of Occupational Safety and Health Compliance Division of Occupational Safety and Health Education and Training (Amendment)

803 KAR 2:420. Blasting and use of explosives.

RELATES TO: KRS 338.051(3), 338.061, 29 C.F.R. 1926.900-.914 STATUTORY AUTHORITY: KRS 338.051(3), 338.061[, 29 C.F.R. 1926]

NECESSITY, FUNCTION, AND CONFORMITY: KRS 338.051(3) requires[and 338.061 authorize] the Kentucky Occupational Safety and Health Standards Board to [adopt and] promulgate occupational safety and health administrative regulations and authorizes the chairman to reference federal standards without board approval if necessary to meet federal time requirements. KRS 338.061 authorizes the board to establish, modify, or repeal standards and reference federal standards. [KRS 338.061(2) provides that the board may incorporate by reference established federal standards and national consensus standards.] This[The following] administrative regulation establishes[contains those] standards [to be] enforced by the Department of Workplace Standards in the construction industry[Division of Occupational Safety and Health Compliance in the area of construction].

Section 1. <u>Definitions</u>. (1) "C.F.R." means Code of Federal Regulations.

- (2) "Employee" is defined by KRS 338.015(2).
- (3) "Employer" is defined by KRS 338.015(1).
- (4) "Secretary" is defined by KRS 338.015(12).
- (5) "Secretary of Labor" means Secretary, Labor Cabinet, or Commissioner, Department of Workplace Standards, Labor Cabinet.
- (6) "Standard" is defined in KRS 338.015(3).[Precautions to be taken to prevent accidental discharge of electric blasting caps from current induced by radar, radio transmitters, lightning, adjacent powerlines dust storms, or other sources of extraneous electricity.]
- Section 2. Except as modified by definitions in Section 1 of this administrative regulation, the construction industry shall comply with 29 C.F.R. 1926, Subpart U, Blasting and the Use of Explosives, published by the Office of the Federal Register, National Archives and Records Services, General Services Administration. [(1) The language in subsection (2) of this section shall apply in lieu of 29 C.F.R. 1926.900(k)(3)(i).
- (a) 1926.900(k)(3)(i), The prominent display of adequate signs warning against the use of mobile radio transmitters, on all roads within 1,000 feet of blasting operations. Whenever adherence to this 1,000 foot distance would create an operational handicap, a competent person shall be consulted to evaluate the particular situation, and alternative provisions may be made which are adequately designed to prevent premature firing of electric blasting caps. The competent person may be a blaster certified by the Kentucky Department of Mines and Minerals with a working knowledge of mobile radio transmission and receiving hazards as related to use of electric blasting cap firing systems and designated by the employer. A description of any alternative shall be in writing describing the unusual conditions at the site and the alternative measure used. The description shall be maintained at the construction site during the duration of the work and shall be available for inspection by representatives of the Secretary, Kentucky Labor Cabinet.
 - (b) 1926.900(k)(4), Ensuring that mobile radio transmitters which are less than 100 feet

away from electric blasting caps, in other than original containers, shall be deenergized, and have the radio transmission circuit or vehicle effectively locked against transmitter usage.

- (2) 29 C.F.R. 1926.900(k)(3)(i) is amended to read: The prominent display of adequate signs warning against the use of mobile radio transmitters, on all roads within 1,000 feet of blasting operations. Whenever adherence to this 1,000 foot distance would create an operational handicap, a competent person shall be consulted to evaluate the particular situation, and alternative provisions may be made which are adequately designed to prevent premature firing of electric blasting caps. The competent person may be a blaster certified by the Kentucky Department of Mines and Minerals with a working knowledge of mobile radio transmission and receiving hazards as related to use of electric blasting cap firing systems and designated by the employer. A description of any alternative shall be in writing describing the unusual conditions at the site and the alternative measure used. The description shall be maintained at the construction site during the duration of the work and shall be available for inspection by representatives of the Secretary, Kentucky Labor Cabinet.
- (3) The language in subsection (4) of this section shall apply in lieu of 29 C.F.R. 1926.900(k)(4).
- (4) 29 C.F.R. 1926.900(k)(4) is amended to read: Ensuring that mobile radio transmitters which are less than 100 feet away from electric blasting caps, in other than original containers, shall be de_energized, and have the radio transmission circuit or vehicle effectively locked against transmitter usage.
- Section 2. Use of Black Powder. (1) The language in subsection (2) of this section shall apply in lieu of 29 C.F.R. 1926.900(p).
- (2) 29 C.F.R. 1926.900(p) is amended to read: The use of black powder shall be prohibited except when a desired result cannot be obtained with another type of explosive, such as in quarrying certain types of dimension stone.
- Section 3. Electric Blast Initiation. (1) The language in subsection (2) of this section shall apply in lieu of 29 C.F.R. 1926.900(r).
- (2) 29 C.F.R. 1926.900(r) is amended to read: All electric blasts shall be fired with an electric blasting machine or properly designed electric power source, and in accordance with the provisions of subsection. 906(a) and (r).
- Section 4. Transporting of Explosives or Blasting Agents. (1) The language in subsection (2) of this section shall apply in lieu of 29 C.F.R. 1926.902(d).
- (2) 29 C.F.R. 1926.902(d) is amended to read: Explosives or blasting agents shall be transported in separate vehicles unless the detonators are packaged in specified containers and transported all in compliance with DOT Regulation 49 C.F.R. 177.835(g).
- Section 5. Underground Transportation of Explosives. (1) The language in subsection (2) of this section shall apply in lieu of 29 C.F.R. 1926.903(o).
 - (2) 29 C.F.R. 1926.903(o) is deleted.
- Section 6. Loading of Explosives or Blasting Agents. (1) The language in subsection (2) of this section shall apply in lieu of 29 C.F.R. 1926.905(h).
- (2) 29 C.F.R. 1926.905(h) is amended to read: Machines and all tools not used for loading explosives into the boreholes shall be removed from the immediate location of holes before explosives are delivered. Equipment shall not be operated within fifty (50) feet of a loaded hole except that which is required when the containment of the blast is necessary to prevent flyrock.

When equipment or machinery is used to place mats, overburden, or protective material on the shot area, a competent person (who may be a blaster certified by the Kentucky Department of Mines and Minerals) shall implement adequate precautions to protect the lead wires or initiating systems such as protecting the components from direct contact with materials which sever, damage, impact, or conduct stray currents to the explosives system. This would include preventing the dragging of blasting mats or running over the holes and systems with the equipment used.

- (3) The language in subsection (4) of this section shall apply in lieu of 29 C.F.R. 1926.905(i).
- (4) 1926.905(i) is amended to read: No activity of any nature other than that which is required for loading holes with explosives and preparation required for initiating the blast and containment of flyrock from the blast shall be permitted in a blast area.
- (5) The language in subsection (6) of this section shall apply in lieu of 29 C.F.R. 1926.905(k).
- (6) 29 C.F.R. 1926.905(k), Holes shall be inspected prior to loading to determine depth and conditions. When necessary to drill a hole in proximity to a charged or misfired hole, the distance between these two (2) holes must be greater than the depth being drilled and precautions taken to ensure the integrity of any adjacent charged hole or misfired hole. This distance must be determined by a competent person (who may be a blaster certified by the Kentucky Department of Mines and Minerals) in order to insure that there is no danger of intersecting the charged or misfired hole.
- (7) The language in subsection (8) of this section shall apply in lieu of 29 C.F.R. 1926.905(n).
- (8) 29 C.F.R. 1926.905(n) is amended to read: In blasting, explosives in Fume Class I, as set forth by the Institute of the Makers of Explosives, shall be used; however, Fume Class I explosives are not required when adequate ventilation is provided and the workings are abandoned for a period of time sufficient to allow dissipation of all fumes.

Section 7. Initiation of Explosive Charges - Electric Blasting. (1) The language in subsection (2) of this section shall apply in lieu of 29 C.F.R. 1926.906(p).

- (2) 29 C.F.R. 1926.906(p) is amended to read: The blaster shall be in charge of the blasting machines, and no other person shall connect the leading wires to the machine except under the immediate physical and visual supervision of the blaster.
- (3) The language in subsection (4) of this section shall apply in lieu of 29 C.F.R. 1926.906(q).
- (4) 29 C.F.R. 1926.906(q) is amended to read: Blasters, when testing circuits to charged holes, shall use only blasting galvanometers equipped with a silver chloride cell especially designed for this purpose or an instrument designed solely for use in blasting, which incorporates a current-limiting device into its circuitry. No instrument capable of producing over fifty (50) milliamps on direct short circuit shall be used.
- (5) The language in subsection (6) of this section shall apply in lieu of 29 C.F.R. 1926.906(s).
- (6) 29 C.F.R. 1926.906(s) is amended to read: Leading wires shall remain shorted and not be connected to the blasting machine or other source of current until the charge is to be fired.

Section 8. Use of Safety Fuse. (1) The language in subsection (2) of this section shall apply in lieu of 29 C.F.R. 1926.907(a).

(2) 29 C.F.R. 1926.907(a) is amended to read: The use of a fuse that has been hammered or injured in any way shall be forbidden.

Section 9. Inspection After Blasting. (1) The language in subsection (2) of this section shall apply in lieu of 29 C.F.R. 1926.910(o).

(2) 29 C.F.R. 1926.910(b) is amended to read: Sufficient time shall be allowed, not less than fifteen (15) minutes in tunnels, for the smoke and fumes to leave the blasted area before returning to the shot. An inspection of the area and the surrounding rubble shall be made by the blaster to determine if all charges have been exploded before employees are allowed to return to the operation.

Section 10. Incorporation by Reference (1) The following material is incorporated by reference:

(a) The material in subparagraphs 1 through 14 of this paragraph, the Code of Federal Regulations, published by the Office of the Federal Register, National Archives and Records Services, General Services Administration, revised as of July 1, 1997, is incorporated by reference:

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1. 29 C.F.R. 1926.900 through 1926.900(k)(2);

2. 29 C.F.R. 1926.900(k)(3)(ii);

3. 29 C.F.R. 1926.900(k)(5) through 1926.900(o);

4. 29 C.F.R. 1926.900(g);

5. 29 C.F.R. 1926.900(s) through 1926.902(c);

6. 29 C.F.R. 1926.902(e) through 1926.903(d);

7. 29 C.F.R. 1926.903(f) through 1926.905(g);

8. 29 C.F.R. 1926.905(j);

9. 29 C.F.R. 1926.905(l) through 1926.905(m);

10. 29 C.F.R. 1926.905(o) through 1926.906(o);

11. 29 C.F.R. 1926.906(t);

12. 29 C.F.R. 1926.906(t);

13. 29 C.F.R. 1926.907(b) through 1926.910(a);

14. 29 C.F.R. 1926.910(c) through 1926.914.
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- (b) The revision to 29 C.F.R. 1926.906, "Initiation of Explosive Charges Electric Blasting", as published in the Federal Register, Volume 63, Number 117, June 18,1998, is incorporated by reference.
- (2) This material may be inspected and copied at: Kentucky Labor Cabinet, Division of Occupational Safety and Health Education and Training, U.S. 127 South, Frankfort, Kentucky 40601. Office hours are 8 a.m. 4:30 p.m. (ET), Monday through Friday.]

LARRY ROBERTS, Secretary

APPROVED BY AGENCY: December 8, 2020

FILED WITH LRC: December 10, 2020 at 11:53 a.m.

PUBLIC HEARING AND PUBLIC COMMENT PERIOD: A public hearing on this administrative regulation shall be held on February 23, 2021 at 10:00 a.m. (ET). The meeting will be conducted by live videoconference (ZOOM) pursuant to Senate Bill 150, Section 1, subparagraph (8) b (2020) and the continuing state of emergency. Public access to the meeting will be available

https://us02web.zoom.us/j/83618567636?pwd=a2FuQnRFeXNNNE5wQjB5QnJDK1ITdz09, password 224995, or telephone (713) 353-0212, or (888) 822-7517 toll free, conference code 533004. Individuals interested in being heard at this hearing shall notify this agency in writing five (5) working days prior to the hearing of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be canceled. This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on

the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to attend the public hearing, you may submit written comments on the proposed administrative regulation. Written comments shall be accepted through February 28, 2020. Send written notification of intent to be heard at the public hearing or written comments on the proposed administrative regulation to the contact person.

CONTACT PERSON: Robin Maples, OSH Standards Specialist, Kentucky Department of Workplace Standards, 500 Mero Street, Frankfort, Kentucky 40601, phone (502) 564-4107, fax (502) 564-4769, email Robin.Maples@ky.gov.

REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Contact person: Robin Maples

- (1) Provide a brief summary of:
- (a) What this administrative regulation does: Section 1 of this administrative regulation, effective since December 15, 1989, defines terms not used in the federal standard. Section 2 adopts the requirements of 29 C.F.R. 1926, Subpart U and strikes unnecessary language. This amendment also updates this administrative regulation to meet KRS Chapter 13A considerations and was reviewed in accordance with House Bill (HB) 50 from the Regular Session of the 2017 General Assembly.
- (b) The necessity of this administrative regulation: This regulation is necessary to meet the requirements established in Section 18 of the OSH Act, 29 C.F.R. 1902.3(c), 29 C.F.R. 1902.3(d), 29 C.F.R. 1953.1, and 29 C.F.R. 1953.5, which all require Kentucky OSH regulations to be as effective as the federal requirements.
- (c) How this administrative regulation conforms to the content of the authorizing statutes: KRS 338.051(3) requires the Kentucky Occupational Safety and Health (OSH) Standards Board to promulgate OSH administrative regulations. This regulation is necessary to meet the requirements established in Section 18 of the OSH Act, 29 C.F.R. 1902.3(c), 29 C.F.R. 1902.3(d), 29 C.F.R. 1953.1, and 29 C.F.R. 1953.5, which all require Kentucky OSH regulations to be as effective as the federal requirements. This regulation complies and conforms with the authorizing statutes.
- (d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation promotes worker safety and health throughout Kentucky and ensures the state is as effective as the federal requirement. This regulation is necessary to meet the requirements established in Section 18 of the OSH Act, 29 C.F.R. 1902.3(c), 29 C.F.R. 1902.3(d), 29 C.F.R. 1953.1, and 29 C.F.R. 1953.5.
- (2) If this is an amendment to an existing administrative regulation, provide a brief summary of:
- (a) How the amendment will change this existing administrative regulation: Section 1 of this administrative regulation, effective since December 15, 1989, defines terms not used in the federal standard. Section 2 adopts the requirements of 29 C.F.R. 1926, Subpart U and strikes unnecessary language. This amendment also updates this administrative regulation to meet KRS Chapter 13A considerations and was reviewed in accordance with HB 50 from the Regular Session of the 2017 General Assembly. Amendments to this regulation are technical and intended to promote understanding of the requirement.
- (b) The necessity of the amendment to this administrative regulation: The Kentucky OSH Program is mandated by 29 C.F.R. Parts 1952 and 1953 to be at least as effective as OSHA.
- (c) How the amendment conforms to the content of the authorizing statutes: This administrative regulation conforms to the content of the authorizing statutes of KRS Chapter 338.051 and

- 338.061. KRS 338.051(3) requires and 338.061 authorizes the Kentucky OSH Standards Board to promulgate occupational safety and health rules and administrative regulations and standards.
- (d) How the amendment will assist in the effective administration of the statutes: This amendment maintains consistency with the federal requirements. This amendment promotes employee health and safety throughout Kentucky and keeps the state program consistent with the federal program.
- (3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: This administrative regulation affects all employers in the Commonwealth engaged in construction activities covered by KRS Chapter 338.
- (4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including: (a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment: No additional compliance duties are imposed and no immediate action is required.
- (b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3): There is no additional cost to the OSH Program to implement this administrative regulation.
- (c) As a result of compliance, what benefits will accrue to the entities identified in question (3): This administrative regulation promotes worker safety and health throughout Kentucky and ensures the state is as effective as the federal requirement.
- (5) Provide an estimate of how much it will cost to implement this administrative regulation: (a) Initially: There is no cost to the OSH Program to implement this administrative regulation.
- (b) On a continuing basis: There is no continuing cost to the OSH Program to implement this administrative regulation.
- (6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation: Current state and federal funding.
- (7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new or by the change if it is an amendment: There is neither an increase in fees nor an increase in funding necessary to implement this amendment.
- (8) State whether or not this administrative regulation establishes any fees or directly or indirectly increases any fees: This administrative regulation neither establishes any fees nor directly or indirectly increases any fees.
- (9) TIERING: Is tiering applied? Tiering is not applied. All employers covered by KRS Chapter 338 are treated equally.

FEDERAL MANDATE ANALYSIS COMPARISON

- 1. Federal statute or regulation constituting the federal mandate. Public Law 91-596, the Occupational Safety and Health Act of 1970, Section 18; 29 C.F.R. 1902.3(c), 29 C.F.R. 1902.3(d), 29 C.F.R. 1953.1, and 29 C.F.R. 1953.5
- 2. State compliance standards. The Kentucky OSH Program is mandated by Section 18 of the OSH Act, 29 C.F.R. 1902.3(c), 29 C.F.R. 1902.3(d), 29 C.F.R. 1953.1, and 29 C.F.R. 1953.5 to develop and enforce standards that are at least as effective as the federal requirement. Accordingly, in order to maintain the state program as effective as the federal program, Kentucky must adopt the federal requirement or develop an equivalent standard.
 - 3. Minimum or uniform standards contained in the federal mandate. The Kentucky OSH

Program is mandated by Section 18 of the OSH Act, 29 C.F.R. 1902.3(c), 29 C.F.R. 1902.3(d), 29 C.F.R. 1953.1, and 29 C.F.R. 1953.5 to develop and enforce standards that are at least as effective as the federal requirement. Accordingly, in order to maintain the state program as effective as the federal program, Kentucky must adopt the federal requirement or develop an equivalent standard.

- 4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? No.
- 5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements: This administrative regulation does not impose stricter requirements.

FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

- 1. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation? This administrative regulation affects any unit, part, or division of local government covered by KRS 338 and engaged in construction industry activities.
- 2. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation. KRS 338.051, KRS 338.061, Public Law 91-596 84 STAT. 1590, 29 C.F.R. 1902.3(c), 29 C.F.R. 1902.3(d), 29 C.F.R. 1953.1, 29 C.F.R. 1953.5
- 3. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect. None.
- (a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year? None.
- (b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years?
- (c) How much will it cost to administer this program for the first year? There are no costs associated with this amendment.
- (d) How much will it cost to administer this program for subsequent years? There are no costs associated with this amendment.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): Unknown.

Expenditures (+/-): Unknown.

Other explanation: This amendment does not impose any additional requirements or expenditures to the employer.